## APPENDIX H: SUPPORT1 FOR THE CLAIMS OF THE PRESENT APPLICATION IN THE DISCLOSURE OF THE PRESENT APPLICATION

## Support in the Present Application (09/589,288) **New Claim** "Like other members of TNF family, Neutrokine-alpha 195. A method of inhibiting B lymphocytes exhibits activity on leukocytes including, for example, comprising administering an effective amount of an monocytes, lymphocytes (e.g., B cells) and neutrophils. antibody that binds a protein whose amino acid For this reason Neutrokine-alpha is active in directing the sequence is: proliferation, differentiation and migration of these cell MDDSTEREQS RLTSCLKKRE EMKLKECVSI types." p. 83:7-10 LPRKESPSVR SSKDGKLLAA TLLLALLSCC LTVVSFYOVA ALQGDLASLR AELQGHHAEK LPAGAGAPKA GLEEAPAVTA GLKIFEPPAP "The antagonists may be employed for instance to GEGNSSONSR NKRAVQGPEE TVTQDCLQLI inhibit Neutrokine-alpha-mediated and/or ADSETPTIQK GSYTFVPWLL SFKRGSALEE Neutrokine-alphaSV-mediated chemotaxis and activation KENKILVKET GYFFIYGQVL YTDKTYAMGH of macrophages and their precursors, and of neutrophils, LIQRKKVHVF GDELSLVTLF RCIQNMPETL basophils, B lymphocytes and some T-cell subsets, e.g., PNNSCYSAGI AKLEEGDELO LAIPRENAQI activated and CD8 cytotoxic T cells and natural killer SLDGDVTFFG cells, in certain auto-immune and chronic inflammatory ALKLL and infective diseases." p. 331:15-19

wherein B lymphocytes are inhibited.

"A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokine-alpha and/or Neutrokine-alphaSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokine-alpha and/or Neutrokine-alphaSV antagonist. Preferred antagonists for use in the present invention are Neutrokine-alpha-

specific and/or Neutrokine-alphaSV-specific antibodies."

p. 24:10-15

"Additionally, as described in detail below, the polypeptides of the present invention have uses that include, but are not limited to, to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokine-alpha and/or Neutrokine-alphaSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokine-alpha and/or Neutrokine-alphaSV function." p. 223:17-22

"Preferred antagonists for use in the present invention are Neutrokine-alpha-specific and/or Neutrokine-alphaSV-specific antibodies." p. 24:14-15. See also p. 429:13 - p. 433:2

"An agonist is a compound which increases the natural

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<sup>&</sup>lt;sup>1</sup> This table shows exemplary support for the indicated claims in Application No. 09/589,288. Applicants reserve the right to supplement this table as necessary.

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	biological functions of Neutrokine-alpha and/or Neutrokine-alphaSV or which functions in a manner similar to Neutrokine-alpha and/or Neutrokine-alphaSV while antagonists decrease or eliminate such functions." p. 366:12-15  "Figures 1A and 1B shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokine-alpha." p. 24:19-20
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196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokine-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.	See support for Claim 195
197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokine-alpha (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.	See support for Claim 195
198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.	See support for Claim 195 and in addition, the following disclosure:
	"Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention."  p. 114:13-15
	"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."  p. 376:23-25
	"In a preferred method, antibodies according to the present invention are mAbs. Such mAbs can be prepared using hybridoma technology (Kohler and Millstein, Nature 256:495-497 (1975) and U.S. Patent No. 4,376,110; Harlow et al., Antibodies: A Laboratory Manual, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 1988; Monoclonal Antibodies and Hybridomas: A New Dimension in Biological Analyses, Plenum Press, New York, NY, 1980; Campbell, "Monoclonal Antibody Technology," In: Laboratory Techniques in Biochemistry and Molecular Biology,

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	Volume 13 (Burdon et al., eds.), Elsevier, Amsterdam (1984))." p. 377:3-10
199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.	See support for Claim 195 and in addition the following disclosure:
	"Methods of Producing Antibodies
	The antibodies of the invention can be produced by any method known in the art for the synthesis of antibodies, in particular, by chemical synthesis or preferably, by recombinant expression techniques."  p. 243:21-24
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	See support for Claim 195 and in addition the following disclosure:
	"Where in vivo imaging is used to detect enhanced levels of Neutrokine-alpha and/or Neutrokine-alphaSV polypeptide for diagnosis in humans, it may be preferable to use human antibodies or "humanized" chimeric monoclonal antibodies. Such antibodies can be produced using techniques described herein or otherwise known in the art. For example methods for producing chimeric antibodies are known in the art. See, for review, Morrison, Science 229:1202 (1985); Oi et al., BioTechniques 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., Nature 312:643 (1984); Neuberger et al., Nature 314:268 (1985)." p. 307:7-16
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	See support for Claims 195 and 200
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	See support for Claims 195 and 200
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	See support for Claim 195 and in addition the following disclosure:
	"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an

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	antigen." p. 376:23-25
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	See support for Claim 195 and in addition the following disclosure:
	"Polyclonal antibodies to an antigen-of-interest can be produced by various procedures well known in the art. For example, a polypeptide of the invention can be administered to various host animals including, but not limited to, rabbits, mice, rats, etc. to induce the production of sera containing polyclonal antibodies specific for the antigen."  p. 234:15-19
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	See support for Claims 195 and 203
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	See support for Claim 195 and in addition the following disclosure:
	"The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described herein."  p. 331:13-14
	"The agonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter." p. 338:18-19
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	See support for Claim 195 and in addition the following disclosure:
	"The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokine-alpha and/or Neutrokine-alphaSV polypeptide on cells, such as its interaction with Neutrokine-alpha and/or Neutrokine-alphaSV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokine-alpha and/or Neutrokine-alphaSV or which functions in a manner similar to Neutrokine-alpha and/or Neutrokine-alphaSV while antagonists decrease or eliminate such functions." p. 366:9-15
	"An in vitro cell proliferation, cytotoxicity, cell survival,

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	and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or deathSuch cell proliferation and/or survival modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases, inflammation and other immune-related diseases."  p. 82:4-15